

ABSTRACT

DOWNHOLE COMPRESSOR

5 A downhole dynamic compressor comprises an electric
motor having a stator 6 with stationary windings and an
armature with permanent magnets 7 supported on gas bearings
9, 10 for rotation relative to the stator. The gas bearings
9 and 10 are arranged at the upstream and downstream
10 opposite ends of the motor, respectively. The dynamic
compressor has a bladed wheel 12 mounted on an overhanging
end of the motor armature 7 that projects beyond the gas
bearing 9 at the upstream end of the motor, whereby all the
gas bearings of the compressor and the electric motor are
15 arranged on the downstream side of the dynamic compressor.

Figure 1